## Before the Federal Communications Commission Washington, D.C. 10554

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HETEVAL COMMUNICATIONS COMMISSION THE OF SECRETARY

In the Matter of Amendment of the Commission's Rules CC Docket No. 92-166 to Establish Rules and Policies Pertaining to a Mobile Satellite Service in 1610-1626.5/2483.5-2500 Frequency Bands

## COMMENTS OF THE CORPORATION FOR PUBLIC BROADCASTING

#### I. INTRODUCTION

The Corporation for Public Broadcasting ("CPB") hereby submits these Comments in response to the Notice of Proposed Rule Making in the above-captioned proceeding, adopted January 19, 1994 ("Notice"), in which the Commission is seeking comments on its proposed regulations for the licensing and operation of mobile satellite systems to provide a variety of voice and data mobile satellite services ("MSS") in the 1610-1626.5/2483.5-2500 MHz frequency bands ("MSS Above 1 GHz Service"). In particular, CPB is responding to the questions raised about certain public service requirements and about ITFS frequency interference. Notice at 87 and 63-65, respectively.

CPB's participation on matters related to the use of technology to provide telecommunications services to all areas of the United States flows from CPB's statutory mandate. CPB is the private, nonprofit corporation established by the Public Broadcasting Act of 1967 ("1967 Act"), as amended, 47 U.S.C.A. Sec. 390 et. seq. (1991 ed.). CPB is filing these Comments as the organization authorized by Congress to encourage the growth

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and development of public radio and television broadcasting, as well as nonbroadcast telecommunications technologies, for the delivery of public telecommunications services. CPB also is mandated to promote "a national policy that will most effectively make public telecommunications services available to all citizens of the United States" ... "through all appropriate available telecommunications distribution technologies." 47 U.S.C.A. Sections 396 (a)(1), (2), and (9).

CPB is not in a position to provide the data and other information sought in the Notice, nor to comment on the specific technological questions about ITFS frequency interference. However, CPB does feel compelled to offer these brief supportive comments on the general policy goals underlying the Commission's proposal to impose service requirements on MSS Above 1 GHz licensees.

# II. PUBLIC SERVICE REQUIREMENTS

Paragraph 87 asks for comment on whether public service requirements (other than those previously mentioned in the Notice) should be imposed on MSS Above 1 GHz licensees. Specifically, the Commission asks whether it "[s]hould [], for example, require licensees to offer a specific percentage of its in-orbit system capacity to nonprofit organizations for purposes such as environmental monitoring or education?" Notice at 87. CPB strongly recommends that the Commission adopt this fundamental principle in this rule making, as well as in other similar proceedings.

MSS Above 1 GHz could play an important part in the provision of public telecommunications services for schools and colleges, as well as for

other public service uses in many American communities. For example, in places like the Arctic regions of Alaska and other areas similarly remote from reliable terrestrial cellular telephone service, MSS Above 1 GHz could provide reliable, efficient telephony where alternative means of providing such services are less reliable or more costly. Telecommunications play an increasingly essential role in extending educational services to learners in many such sparsely-populated and remote areas.

Other possible uses include "last-mile" connections by schools, libraries, and other local community institutions to a nationwide online computer network where toll charges for LEC or cellular service to the nearest local node are high. One such online network designed to provide educational services is PBS Online, which the Public Broadcasting Service ("PBS") is currently launching on its new very-small-aperture-terminal ("VSAT") satellite network. In the VSAT network, a satellite backbone provides a very low-cost or no-cost means to connect schools across the country, but local charges for "last-mile" connection to the network may prove prohibitive for some users.

The global nature of low-earth-orbit ("LEO") MSS Above 1 GHz would also be of significant value to education in a relatively new application of telecommunications to learning — the "electronic field trip." In one such pioneering demonstration, school children in the U.S. were connected with scientists studying marine life around Antarctica. Using National Research and Education Network (NREN) and Internet connections, a few hundred school children were able to talk directly and correspond regularly with scientists and researchers. The ability of students to make such connections with experts and teachers in mobile, remote circumstances

around the world can have significant instructional benefits, above and beyond the utility of mobile communications for the researchers themselves.

The practical application of MSS Above 1 GHz telecommunications in distance education services, as in many other situations, will require a consistent approach to the economic issues involved in insuring access to all telecommunications services to both the learners and the educational service providers. CPB believes that the Commission has pointed the way toward the appropriate steps to tackle some of these difficult economic issues. Notice at 87. The Commission rightly suggests that the appropriateness of such requirements in this particular instance — or in relation to any other service — depends on the specific facts about the relative costs of providing comparable educational services by other means. Id.

Unfortunately, however, many of the educational services that public broadcasters provide are quite new (some of them are still in the pilot stages). For this reason, CPB is not yet able to offer the Commission information about the comparable costs of the means through which these educational services are provided today. CPB is even less able to anticipate the costs of other means of distributing such services, because many of the new distribution methods have yet to be implemented. In addition, the costs projected by various proponents for transceivers and service in MSS Above 1 GHz vary enormously.

In any event, CPB is confident that, in order to insure public access to the MSS Above 1 GHz Services, the Commission must require licensees to make their systems accessible to the learners as well as the educational service providers at preferential rates. Many, if not most, of

the public service uses such as education depend heavily on two-way, interactive communications, and therefore the economic burden is borne equally by the end-user and the service provider. Hence, the rate relief that the Commission should require licensees to offer should extend to the benefit of both learners and educational service providers. In the context of telephony, for example, rate relief could be extended to end users, without imposing undue administrative burden on the operators of MSS Above 1 GHz Services, by granting educational service providers reduced rates for "inward-WATS"-type service.

Nevertheless, even if the Commission decides not to mandate this kind of rate preference in this proceeding, the basic underlying principle remains unquestionable. Therefore licensees in a wide variety of other services should be obligated to offer the use of their systems to nonprofit public service organizations and the users of those public services at substantially reduced rates — certainly no greater than the licensees' incremental costs that are allocable only to such organizations and other users.

In sum, CPB commends the Commission for its acknowledgment of the importance of dealing with these economic barriers to the public's use of non-profit public services, and its recognition that a careful and detailed factual case must be built in each instance. CPB looks forward to working closely with the Commission in developing such an approach.

### III. ITFS

CPB is also concerned about the questions raised about the possible interference to MSS Above 1 GHz transceivers operating near

ITFS transmitters. Notice at 63-65. CPB urges the Commission to require that any costs of upgrading ITFS transmission facilities to remedy such interference be borne by the MSS Above 1 GHz applicants.

Respectfully submitted,

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